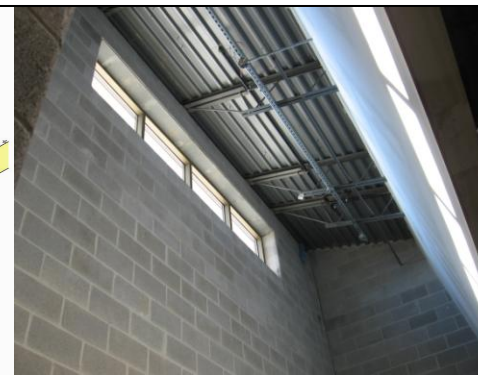
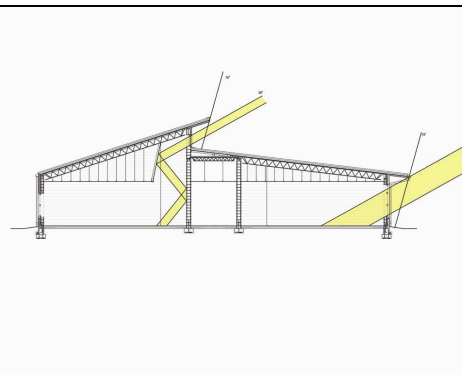


High Performance Sustainable Schools

Athens-Chilesburg Elementary

- **HOLISTIC APPROACH**
- **DAYLIGHTING**





High Performance Sustainable Schools

Athens-Chilesburg Elementary

- ***Ancient ways of building***
- ***Not new trendy approach***
- ***Integration of environment + technology***

Holistic Approach



High Performance Sustainable Schools

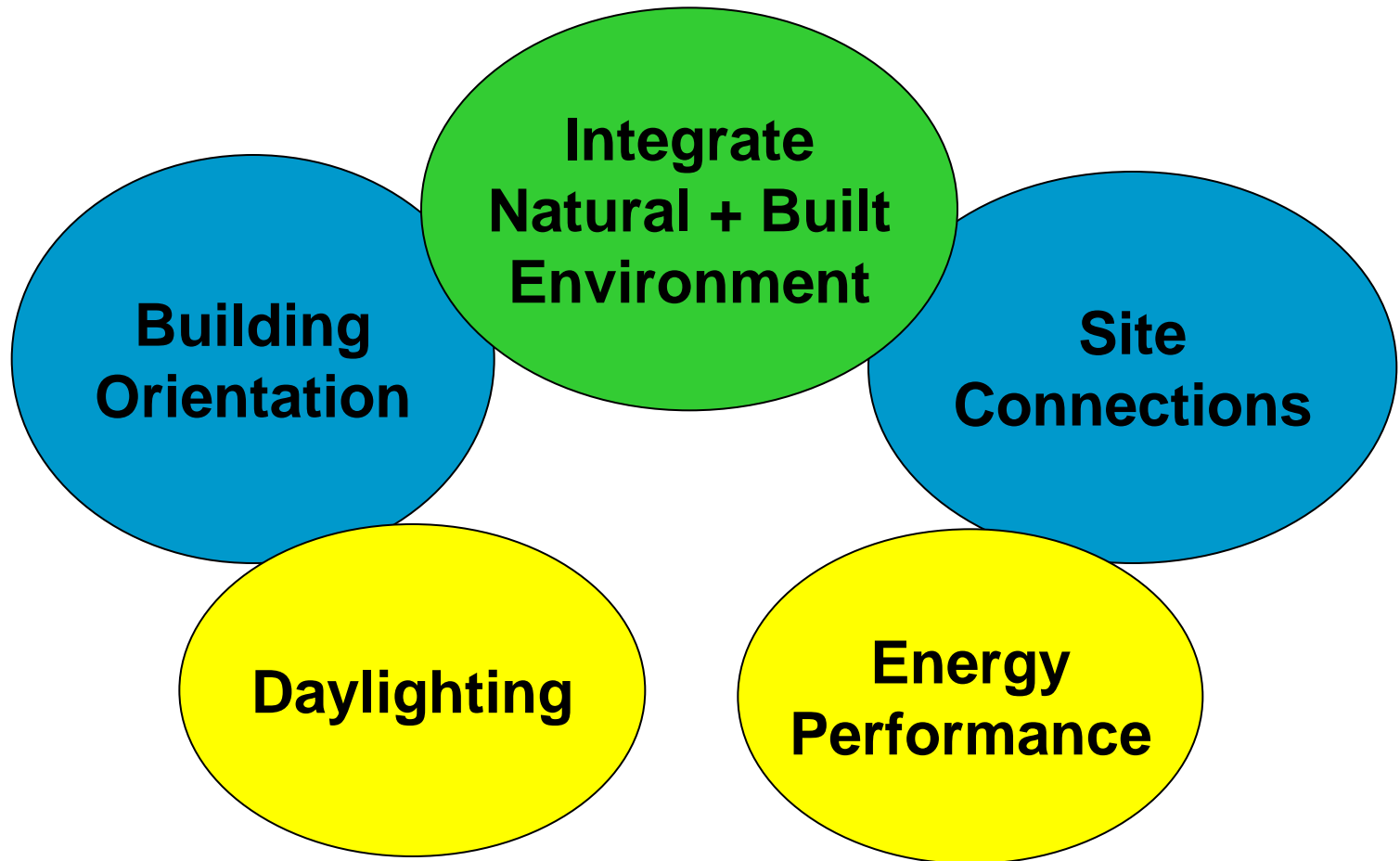
Athens-Chilesburg Elementary

- ***Optimize the combined impact of all design elements***
- ***Optimize to achieve long term value and performance***
- ***Create an enduring asset to the community***

Holistic Approach

High Performance Sustainable Schools

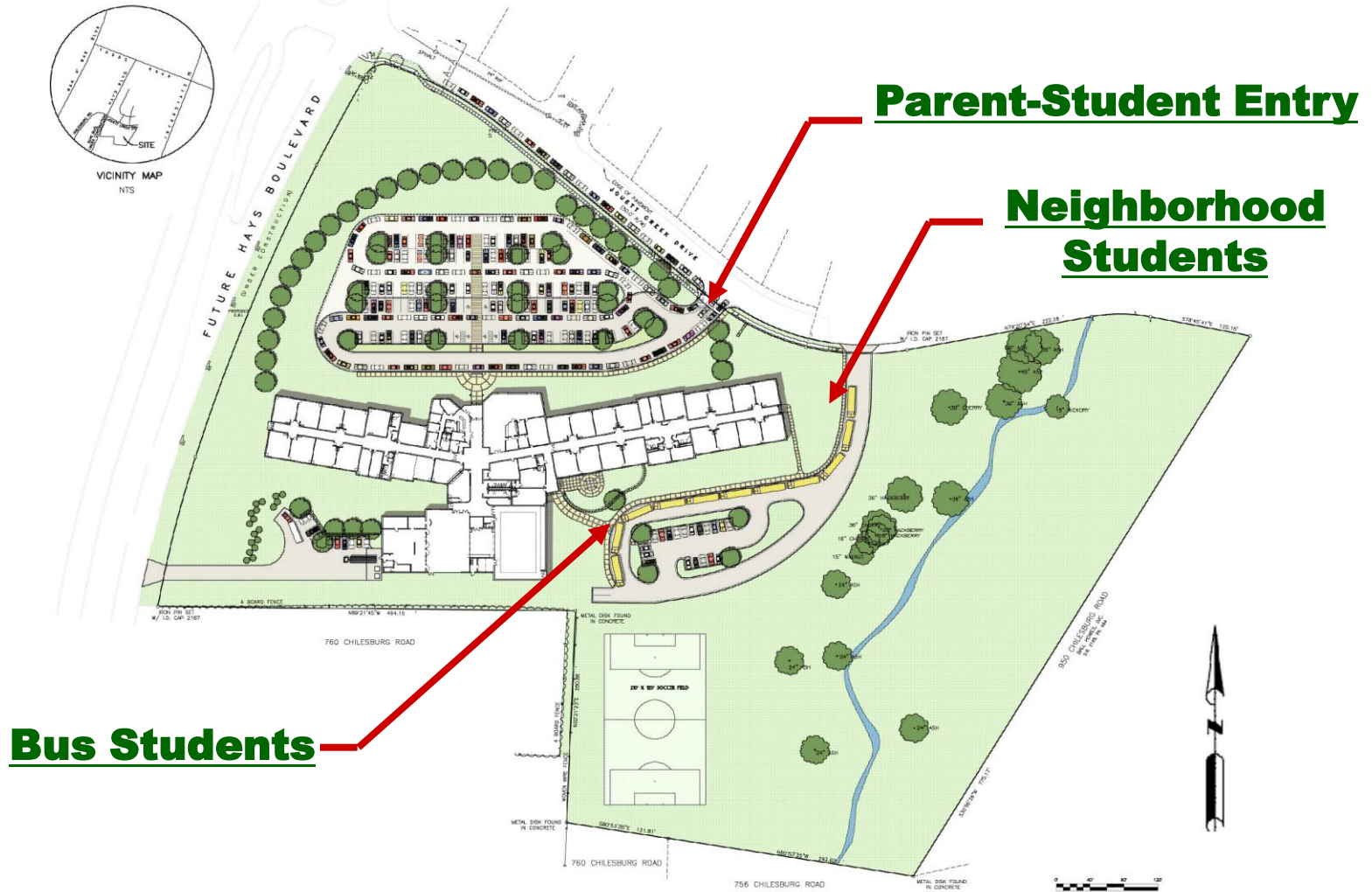
Athens-Chilesburg Elementary



Holistic Approach

High Performance Sustainable Schools

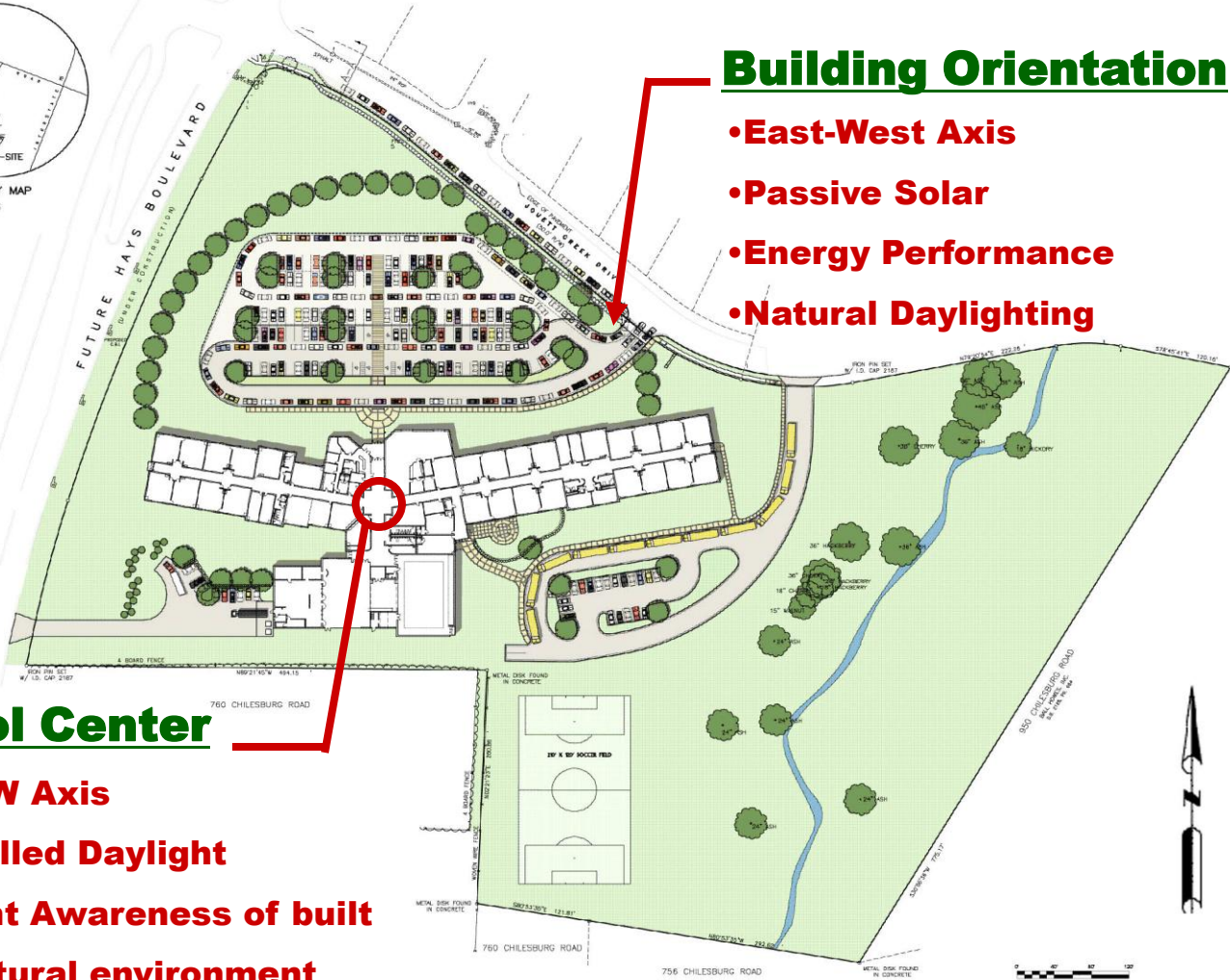
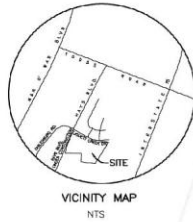
Athens-Chilesburg Elementary



Neighborhood Connections

High Performance Sustainable Schools

Athens-Chilesburg Elementary



Building Orientation

- East-West Axis
- Passive Solar
- Energy Performance
- Natural Daylighting

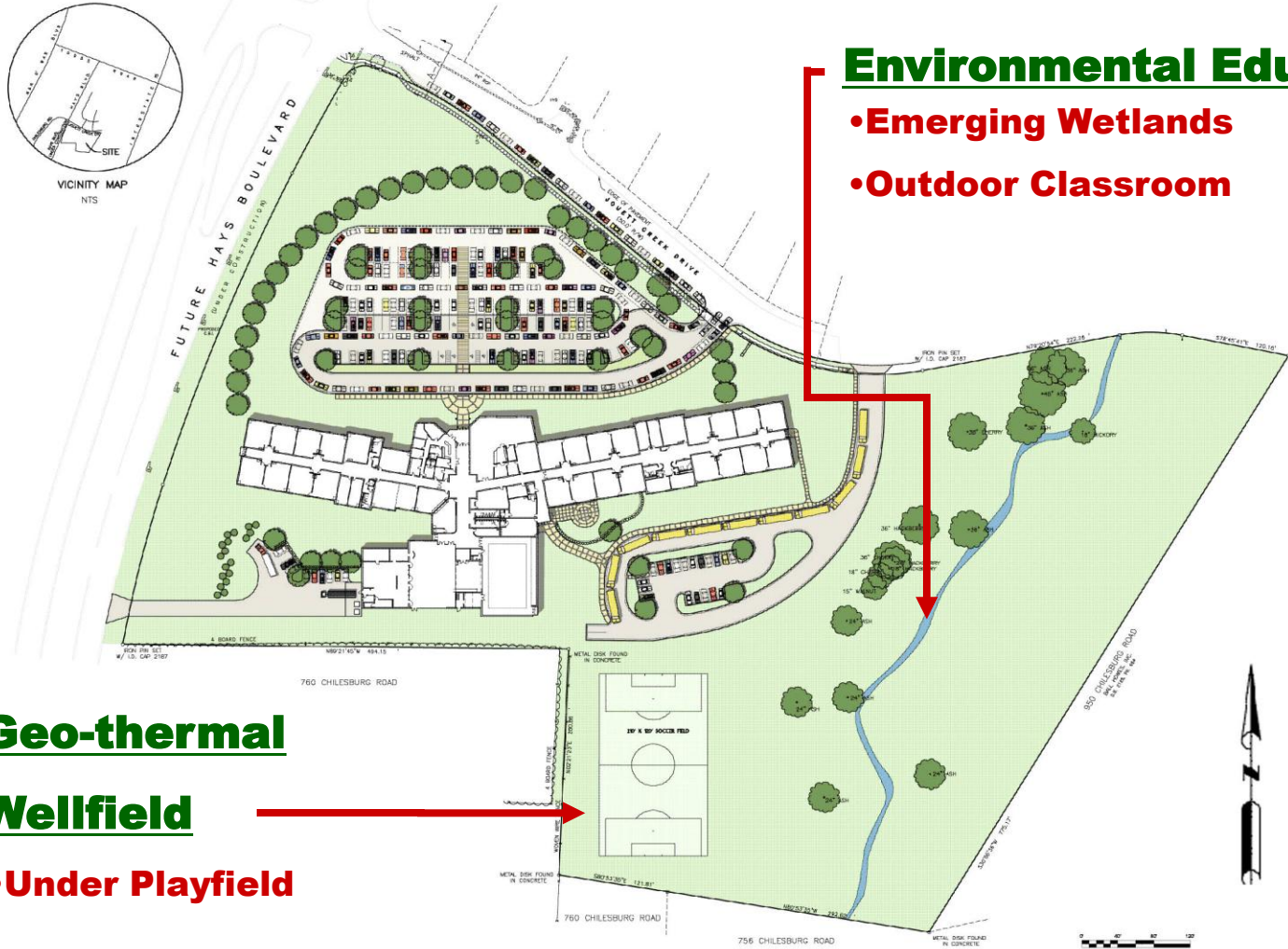
School Center

- N-S-E-W Axis
- Controlled Daylight
- Student Awareness of built and natural environment

Holistic Approach

High Performance Sustainable Schools

Athens-Chilesburg Elementary



Environmental Education

- Emerging Wetlands
- Outdoor Classroom

Geo-thermal

Wellfield

- Under Playfield

Holistic Approach

High Performance Sustainable Schools

Athens-Chilesburg Elementary

**Natural
Light**

Passive Solar

Dimming

HVAC Sensors

Natural Daylighting

High Performance Sustainable Schools

Athens-Chilesburg Elementary



- **Classroom Windows: 84 SF = 10.5% Total Floor Area**
- **Classroom + Commons Clerestories**
- **Cupola at school center**
- **Controlled Entry: Deep Roof Overhangs**

Natural Daylighting

High Performance Sustainable Schools

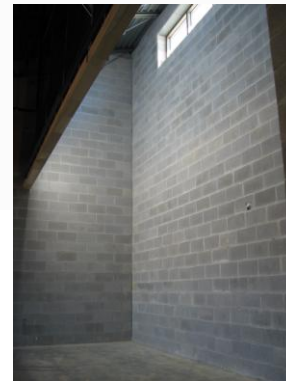
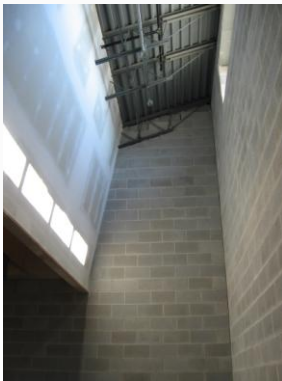
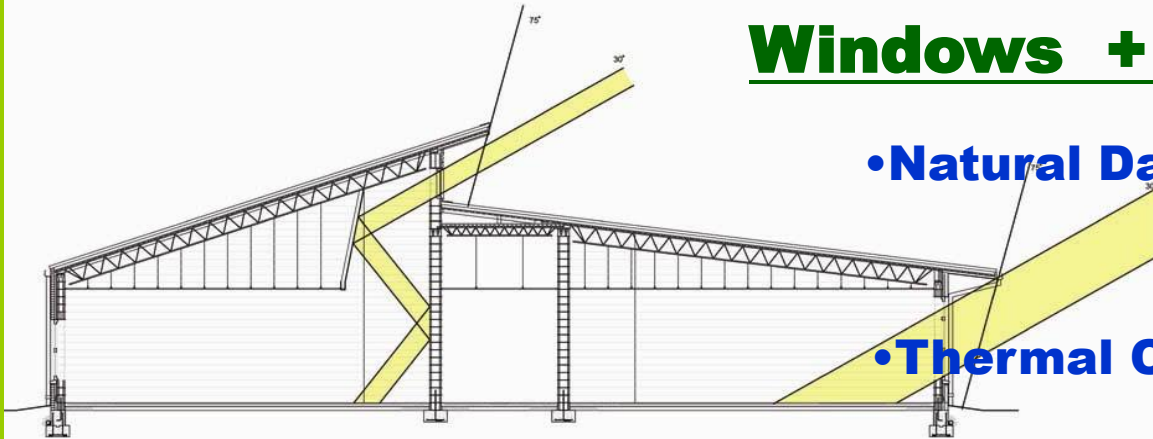
Athens-Chilesburg Elementary

Windows + Clerestories

- **Natural Daylight + Dimming**

- **Thermal Comfort + Sensors**

- **Reduce costs - Cooling + Elec**



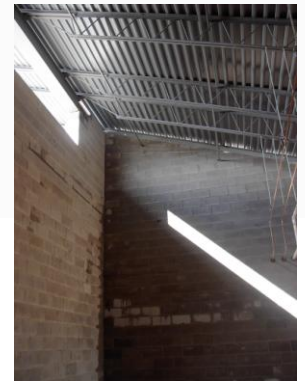
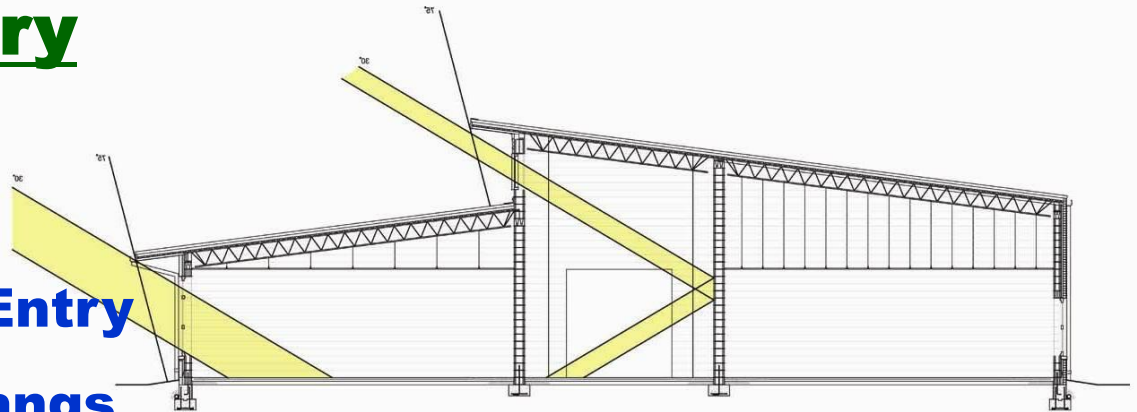
Natural Daylighting

High Performance Sustainable Schools

Athens-Chilesburg Elementary

Clerestory

- **Internal Daylighting**
- **Controlled Entry**
- **Roof Overhangs**



Natural Daylighting



High Performance Sustainable Schools

Athens-Chilesburg Elementary

- **Life-Cycle Costing**
- **Lower energy costs**
- Buildings that accommodate the future
- Wise use of Natural Resources
- Increase student awareness of environment
- Healthy + Productive Environment for Students

Costs + Benefits